Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_

**Homework due Mon Sept 15: Cell Structures Story**

Directions: *Use the words at the bottom (& Sec 7.3) to complete the story (note: all words may not be used)*

All cells are surrounded by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ which controls what enters and exits the cell. The cell itself needs support and structure, so in both plant and animal cells a system of filaments called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ provide this support so the cell keeps its shape. In plant cells, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ also provides structure and support, making plant cells very boxy, and is located just outside the plasma/cell membrane. The semi-fluid interior of cell is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, is the organelle which holds the DNA (deoxyribonucleic acid) which are the instructions for making proteins. Inside the nucleus is the nucleolus which produces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, small non-membrane bound structures that help assemble proteins. Proteins carry out most of the functions in a cell.

Proteins and lipids are synthesized on the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, like the assembly lines of a factory. Once the proteins are assembled, they are sorted and packaged by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ so that they can be sent out of the cell to other parts of the organism that need them. If the cell no longer needs any molecules, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ will take care of them by digesting and breaking them down, like the recycling center of a factory.

No cell can do all these things without some energy! \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ provide this energy in **both** plant and animal cells by converting glucose (sugar) into high-energy compounds called ATP in a process called cellular respiration. Plant cells have another important organelle for energy called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that turns sunlight energy into glucose through the process of photosynthesis. Plant cells also have a large \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which is used for storage of water and extra nutrients. Some animals have this organelle but it is much smaller.

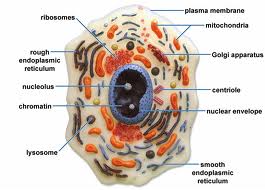
Some cells need structures for movement. Cells such as human sperm cells have a tail-like structure called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that allows them to “swim” through liquid environments. Other cells such as a *Paramecium* have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_tiny hair-like projections all around the cells that beat back and forth to propel the cell in different directions.

RIBOSOMES CYTOPLASM

CENTRIOLES CHLOROPLAST

NUCLEUS LYSOSOME

GOLGI APPARATUS FLAGELLUM

[](http://www.google.com/imgres?um=1&hl=en&safe=active&sa=N&rls=com.microsoft:en-us&biw=1024&bih=571&tbm=isch&tbnid=PGQi4Gn3Rq8w3M:&imgrefurl=http://classes.midlandstech.edu/carterp/Courses/bio101/labquiz2/ss6.htm&docid=dkh3U4gdX2TXYM&imgurl=http://classes.midlandstech.edu/carterp/Courses/bio101/labquiz2/cell2.jpg&w=700&h=502&ei=XO7XTpjLKcfUgAeU7K3_Dg&zoom=1)CELL WALL VACUOLE

ENDOPLASMIC RECTICULUM MITOCHONDRIA

PLASMA MEMBRANE CILIA

CYTOSKELETON